

## **RAW SEQUENCE LISTING**

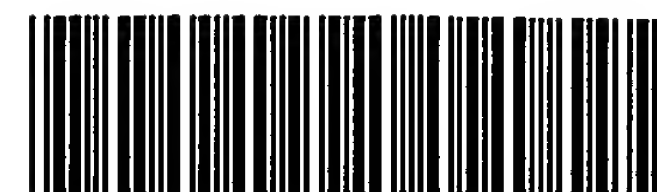
**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 09/683,264A

Source: IFW/6

Date Processed by STIC: 4/28/06

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IFW16

## RAW SEQUENCE LISTING

DATE: 04/28/2006

PATENT APPLICATION: US/09/683,264A

TIME: 12:14:05

Input Set : A:\SubSeqList.ST25.txt

Output Set: N:\CRF4\04282006\I683264A.raw

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3 <110> APPLICANT: Affymetrix, Inc.
4     Siani-Rose, Michael A.
5     Shigeta, Ron
7 <120> TITLE OF INVENTION: Computer Software for Automated Annotation of Biological
8     Sequences
10 <130> FILE REFERENCE: 018547-048820US
12 <140> CURRENT APPLICATION NUMBER: US 09/683,264A
13 <141> CURRENT FILING DATE: 2001-12-05
15 <150> PRIOR APPLICATION NUMBER: US 60/285,144
16 <151> PRIOR FILING DATE: 2001-04-19
18 <150> PRIOR APPLICATION NUMBER: US 60/285,403
19 <151> PRIOR FILING DATE: 2001-04-20
21 <160> NUMBER OF SEQ ID NOS: 5
23 <170> SOFTWARE: PatentIn version 3.3
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 373
27 <212> TYPE: PRT
28 <213> ORGANISM: Artificial
30 <220> FEATURE:
31 <223> OTHER INFORMATION: Protein with similarity to VHR dual specificity phosphatase
33 <400> SEQUENCE: 1
35 Leu Leu Gln Asp Ser Leu Leu Arg Leu Lys Asp Tyr Arg Gln Cys Phe
36 1           5           10           15
39 Glu Cys Ser Asp Val Ala Leu Asn Glu Ala Val Gln Gln Met Val Asn
40           20           25           30
43 Ser Gly Glu Ala Ala Ala Lys Glu Trp Val Ala Thr Val Thr Gln
44           35           40           45
47 Leu Leu Met Gly Ile Glu Gln Ala Leu Ser Ala Asp Ser Ser Gly Ser
48           50           55           60
51 Ile Leu Lys Val Ser Ser Ser Thr Thr Gly Leu Val Arg Leu Thr Asn
52 65           70           75           80
55 Asn Leu Ile Gln Val Ile Asp Cys Ser Met Ala Val Gln Glu Glu Ala
56           85           90           95
59 Lys Glu Pro His Val Ser Ser Val Leu Pro Trp Ile Ile Leu His Arg
60           100          105          110
63 Ile Ile Trp Gln Glu Glu Asp Thr Phe His Ser Leu Cys His Gln Gln
64           115          120          125
67 Gln Leu Gln Asn Pro Ala Glu Glu Gly Met Ser Glu Thr Pro Met Leu
68           130          135          140
71 Pro Ser Ser Leu Met Leu Leu Asn Thr Ala His Glu Tyr Leu Gly Arg
72 145          150          155          160
75 Arg Ser Trp Cys Cys Asn Ser Asp Gly Ala Leu Leu Arg Phe Tyr Val
76           165          170          175

```

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79 Arg Val Leu Gln Lys Glu Leu Ala Ala Ser Thr Ser Glu Asp Thr His
80          180          185          190
83 Pro Tyr Lys Glu Glu Leu Glu Thr Ala Leu Glu Gln Cys Phe Tyr Cys
84          195          200          205
87 Leu Tyr Ser Phe Pro Ser Lys Lys Ser Lys Ala Arg Tyr Leu Glu Glu
88          210          215          220
91 His Ser Ala Gln Gln Val Asp Leu Ile Trp Glu Asp Ala Leu Phe Met
92 225          230          235          240
95 Phe Glu Tyr Phe Lys Pro Lys Thr Leu Pro Glu Phe Asp Ser Tyr Lys
96          245          250          255
99 Thr Ser Thr Val Ser Ala Asp Leu Ala Asn Leu Leu Lys Arg Ile Ala
100          260          265          270
103 Thr Ile Val Pro Arg Thr Glu Arg Pro Ala Leu Ser Leu Asp Lys Val
104          275          280          285
107 Ser Ala Tyr Ile Glu Gly Thr Ser Thr Glu Val Pro Cys Leu Pro Glu
108          290          295          300
111 Gly Ala Asp Pro Ser Pro Pro Val Val Asn Glu Leu Tyr Tyr Leu Leu
112 305          310          315          320
115 Ala Asp Tyr His Phe Lys Asn Lys Glu Gln Ser Lys Ala Ile Lys Phe
116          325          330          335
119 Tyr Met His Asp Ile Cys Ile Cys Pro Asn Arg Phe Asp Ser Trp Ala
120          340          345          350
123 Gly Met Ala Leu Ala Arg Ala Ser Arg Ile Gln Asp Lys Leu Asn Ser
124          355          360          365
127 Asn Glu Leu Lys Ser
128          370
131 <210> SEQ ID NO: 2
132 <211> LENGTH: 178
133 <212> TYPE: PRT
134 <213> ORGANISM: Artificial
136 <220> FEATURE:
137 <223> OTHER INFORMATION: VHR dual specificity phosphatase
139 <400> SEQUENCE: 2
141 Ser Val Gln Asp Leu Asn Asp Leu Leu Ser Asp Gly Ser Gly Cys Tyr
142 1          5          10          15
145 Ser Leu Pro Ser Gln Pro Cys Asn Glu Val Thr Pro Arg Ile Tyr Val
146          20          25          30
149 Gly Asn Ala Ser Val Ala Gln Asp Ile Pro Lys Leu Gln Lys Leu Gly
150          35          40          45
153 Ile Thr His Val Leu Asn Ala Ala Glu Gly Arg Ser Phe Met His Val
154          50          55          60
157 Asn Thr Asn Ala Asn Phe Tyr Lys Asp Ser Gly Ile Thr Tyr Leu Gly
158 65          70          75          80
161 Ile Lys Ala Asn Asp Thr Gln Glu Phe Asn Leu Ser Ala Tyr Phe Glu
162          85          90          95
165 Arg Ala Ala Asp Phe Ile Asp Gln Ala Leu Ala Gln Lys Asn Gly Arg
166          100          105          110
169 Val Leu Val His Cys Arg Glu Gly Tyr Ser Arg Ser Pro Thr Leu Val
170          115          120          125

```

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```

173 Ile Ala Tyr Leu Met Met Arg Gln Lys Met Asp Val Lys Ser Ala Leu
174      130      135      140
177 Ser Ile Val Arg Gln Asn Arg Glu Ile Gly Pro Asn Asp Gly Phe Leu
178 145      150      155      160
181 Ala Gln Leu Cys Gln Leu Asn Asp Arg Leu Ala Lys Glu Gly Lys Leu
182      165      170      175

```

185 Lys Pro

189 &lt;210&gt; SEQ ID NO: 3

190 &lt;211&gt; LENGTH: 159

191 &lt;212&gt; TYPE: PRT

192 &lt;213&gt; ORGANISM: Artificial

194 &lt;220&gt; FEATURE:

195 &lt;223&gt; OTHER INFORMATION: Protein phosphatase 5

197 &lt;400&gt; SEQUENCE: 3

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199 Pro Pro Ala Asp Gly Ala Leu Lys Arg Ala Glu Glu Leu Lys Thr Gln
200 1      5      10      15
203 Ala Asn Asp Tyr Phe Lys Ala Lys Asp Tyr Glu Asn Ala Ile Lys Phe
204      20      25      30
207 Tyr Ser Gln Ala Ile Glu Leu Asn Pro Ser Asn Ala Ile Tyr Tyr Gly
208      35      40      45
211 Asn Arg Ser Leu Ala Tyr Leu Arg Thr Glu Cys Tyr Gly Tyr Ala Leu
212      50      55      60
215 Gly Asp Ala Thr Arg Ala Ile Glu Leu Asp Lys Lys Tyr Ile Lys Gly
216 65      70      75      80
219 Tyr Tyr Arg Arg Ala Ala Ser Asn Met Ala Leu Gly Lys Phe Arg Ala
220      85      90      95
223 Ala Leu Arg Asp Tyr Glu Thr Val Val Lys Val Lys Pro His Asp Lys
224      100     105     110
227 Asp Ala Lys Met Lys Tyr Gln Glu Cys Asn Lys Ile Val Lys Gln Lys
228      115     120     125
231 Ala Phe Glu Arg Ala Ile Ala Gly Asp Glu His Lys Arg Ser Val Val
232      130     135     140
235 Asp Ser Leu Asp Ile Glu Ser Met Thr Ile Glu Asp Glu Tyr Ser
236 145     150     155

```

239 &lt;210&gt; SEQ ID NO: 4

240 &lt;211&gt; LENGTH: 235

241 &lt;212&gt; TYPE: PRT

242 &lt;213&gt; ORGANISM: Artificial

244 &lt;220&gt; FEATURE:

245 &lt;223&gt; OTHER INFORMATION: Protein with protein phosphatase 5 fold

247 &lt;400&gt; SEQUENCE: 4

```

249 Pro Leu Cys Lys Gln Ala Leu Glu Asp Leu Glu Lys Thr Ser Gly His
250 1      5      10      15
253 Asp His Pro Asp Val Ala Thr Met Leu Asn Ile Leu Ala Leu Val Tyr
254      20      25      30
257 Arg Asp Gln Asn Lys Tyr Lys Glu Ala Ala His Leu Leu Asn Asp Ala
258      35      40      45
261 Leu Ala Ile Arg Glu Lys Thr Leu Gly Lys Asp His Pro Ala Val Ala
262      50      55      60

```

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```

265 Ala Thr Leu Asn Asn Leu Ala Val Leu Tyr Gly Lys Arg Gly Lys Tyr
266 65              70              75              80
269 Lys Glu Ala Glu Pro Leu Cys Lys Arg Ala Leu Glu Ile Arg Glu Lys
270              85              90              95
273 Val Leu Gly Lys Phe His Pro Asp Val Ala Lys Gln Leu Ser Asn Leu
274              100             105             110
277 Ala Leu Leu Cys Gln Asn Gln Gly Lys Ala Glu Glu Val Glu Tyr Tyr
278              115             120             125
281 Tyr Arg Arg Ala Leu Glu Ile Tyr Ala Thr Arg Leu Gly Pro Asp Asp
282              130             135             140
285 Pro Asn Val Ala Lys Thr Lys Asn Asn Leu Ala Ser Cys Tyr Leu Lys
286 145              150             155             160
289 Gln Gly Lys Tyr Gln Asp Ala Glu Thr Leu Tyr Lys Glu Ile Leu Thr
290              165             170             175
293 Arg Ala His Glu Lys Glu Phe Gly Ser Val Asn Gly Asp Asn Lys Pro
294              180             185             190
297 Ile Trp Met His Ala Glu Glu Arg Glu Glu Ser Lys Asp Lys Arg Arg
298              195             200             205
301 Asp Ser Ala Pro Tyr Gly Glu Tyr Gly Ser Trp Tyr Lys Ala Cys Lys
302              210             215             220
305 Val Asp Ser Pro Thr Val Asn Thr Thr Leu Arg
306 225              230             235
309 <210> SEQ ID NO: 5
310 <211> LENGTH: 233
311 <212> TYPE: PRT
312 <213> ORGANISM: Artificial
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Protein with protein phosphatase 5 fold
317 <400> SEQUENCE: 5
319 Lys Asp Trp Lys Gly Ala Leu Asp Ala Phe Ser Ala Val Gln Asp Pro
320 1              5              10              15
323 His Ser Arg Ile Cys Phe Asn Ile Gly Cys Met Tyr Thr Ile Leu Lys
324              20              25              30
327 Asn Met Thr Glu Ala Glu Lys Ala Phe Thr Arg Ser Ile Asn Arg Asp
328              35              40              45
331 Lys His Leu Ala Val Ala Tyr Phe Gln Arg Gly Met Leu Tyr Tyr Gln
332              50              55              60
335 Thr Glu Lys Tyr Asp Leu Ala Ile Lys Asp Leu Lys Glu Ala Leu Ile
336 65              70              75              80
339 Gln Leu Arg Gly Asn Gln Leu Ile Asp Tyr Lys Ile Leu Gly Leu Gln
340              85              90              95
343 Phe Lys Leu Phe Ala Cys Glu Val Leu Tyr Asn Ile Ala Phe Met Tyr
344              100             105             110
347 Ala Lys Lys Glu Glu Trp Lys Lys Ala Glu Glu Gln Leu Ala Leu Ala
348              115             120             125
351 Thr Ser Met Lys Ser Glu Pro Arg His Ser Lys Ile Asp Lys Ala Met
352              130             135             140
355 Glu Cys Val Trp Lys Gln Lys Leu Tyr Glu Pro Val Val Ile Pro Val
356 145              150             155             160

```

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DATE: 04/28/2006

PATENT APPLICATION: US/09/683,264A

TIME: 12:14:05

Input Set : A:\SubSeqList.ST25.txt

Output Set: N:\CRF4\04282006\I683264A.raw

```
359 Gly Lys Leu Phe Arg Pro Asn Glu Arg Gln Val Ala Gln Leu Ala Lys
360           165           170           175
363 Lys Asp Tyr Leu Gly Lys Ala Thr Val Val Ala Ser Val Val Asp Gln
364           180           185           190
367 Asp Ser Phe Ser Gly Phe Ala Pro Leu Gln Pro Gln Ala Ala Glu Pro
368           195           200           205
371 Pro Pro Arg Pro Lys Thr Pro Glu Ile Phe Arg Ala Leu Glu Gly Glu
372           210           215           220
375 Ala His Arg Val Leu Phe Gly Phe Val
376 225           230
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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 04/28/2006  
PATENT APPLICATION:    US/09/683,264A      TIME: 12:14:06

Input Set : A:\SubSeqList.ST25.txt  
Output Set: N:\CRF4\04282006\I683264A.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5

**VERIFICATION SUMMARY**

DATE: 04/28/2006

PATENT APPLICATION: US/09/683,264A

TIME: 12:14:06

Input Set : A:\SubSeqList.ST25.txt

Output Set: N:\CRF4\04282006\I683264A.raw